



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,329	05/15/2001	Ricky Ah-Man Woo	8086	1099

27752 7590 10/21/2003

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER

KRISHNAN, GANAPATHY

ART UNIT	PAPER NUMBER
----------	--------------

1623

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/855,329

Applicant(s)

WOO ET AL.

Examiner

Ganapathy Krishnan

Art Unit

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11--15 is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,10,16-19,21,22 and 26 is/are rejected.
- 7) ☒ Claim(s) 4,7-9,20 and 23-25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The amendment (paper #9) filed July 28, 2003 has been received, entered into the record and carefully considered. The following information provided in the amendment affects the instant application:

1. Claims 1 and 16 have been amended.
2. New claims 17-26 have been added.
3. Remarks drawn to 35 USC 102 and 103 (a) rejections.

Claims 1-26 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Pitha (US 6,001,821) and Kenzo (Patent Abstracts of Japan, Pub. No. 03284616) has been overcome by amendments to the claims.

However, claims 1, 2, 3, 5, 6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda et al (Kokai Patent Application No. HEI 3-284616).

Matsuda et al disclose compositions comprising low-degree of substitution cyclodextrin derivatives and a fragrance (perfume material) (examples 4 and 5 on pages 9 and 10). The compositions contain hydroxyalkylated cyclodextrins. Mixtures of cyclodextrins are hydroxyalkylated and used. The degree of substitution is 5.1 (page 4,

Art Unit: 1623

line 11 through page 5, line 27). This disclosure of Matsuda is seen to meet the limitations of claims 1, 2, 3, 5, 6 and 10. The recitation “for capturing unwanted molecules” is intended use and is not given patentable weight.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pitha (US 6001821) in combination with Trinh et al (US 5668097) has been overcome in view of the arguments advanced by the applicants.

However, claims 16-19, 21, 22 and 26 are rejected as being unpatentable over Matsuda et al (Kokai Patent Application No. HEI 3-284616) in view of Trinh et al (WO 96/04937).

Claims 16-19, 21, 22 and 26 are drawn to a method of capturing unwanted molecules from a surface comprising applying a composition comprising low-degree of substitution cyclodextrin derivative; wherein the composition further comprises perfume material; wherein the cyclodextrin derivative is selected from low-degree of substitution hydroxyalkylated, alkylated cyclodextrins and mixtures thereof and specific degrees of substitution.

Matsuda et al disclose compositions comprising low-degree of substitution cyclodextrin derivatives (degree of substitution is 5.1) and a fragrance (perfume material)

Art Unit: 1623

(examples 4 and 5 on pages 9 and 10). The compositions contain hydroxyalkylated cyclodextrins. Mixtures of cyclodextrins are hydroxyalkylated and used (page 4, line 11 through page 5, line 27).

Trinh et al disclose that the specific coupling and conformation of the glucose units give the cyclodextrins a conical molecular structure with a hollow interior. The unique shape and properties of the cavity enable the cyclodextrin to absorb (or capture) molecules into this cavity. Hence, cyclodextrins and especially mixtures of cyclodextrins with different sizes of cavities can be used to capture malodorous molecules. Trinh also discloses that some molecules like low molecular weight amine and acids complex well with cyclodextrins when dry (see page 4, line 19 through page 5 line 6). Trinh discloses a method of treating a surface to remove malodor by applying a composition comprising cyclodextrins and letting it dry (see page 43, lines 1-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Trinh and Matsuda and use a composition comprising low-degree of substitution cyclodextrin derivatives in a method of capturing unwanted molecules by applying a composition comprising the said cyclodextrin derivatives to the surface and allowing the composition to dry since the composition and the method is seen to be disclosed in the prior art.

One of ordinary skill in the art would be motivated to do so since the good clathrating abilities of the low degree cyclodextrin derivatives (Matsuda page 4, lines 3-9) and their enhanced effectiveness in absorbing molecules when dry as disclosed by Trinh et al would provide for a simple and superior method of capturing unwanted molecules.

Conclusion

1. Claims 1, 2, 3, 5, 6, 10, 16-19, 21, 22 and 26 are rejected.
2. Claims 11-15 are allowed.
3. Claims 4, 7-9, 20, 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 703-305-4837. The examiner can normally be reached on 8.30am-5pm.

Art Unit: 1623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

GK



JAMES O. WILSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600